



# HSIP Noteworthy Practice Series

## *Revisiting SHSP Emphasis Areas*

### About the HSIP Noteworthy Practice Series

The Highway Safety Improvement Program (HSIP) is a core Federal-aid highway program with the primary purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. Many states and local agencies are successfully implementing innovative approaches to HSIP planning, implementation, and evaluation. The HSIP Noteworthy Practices Series presents case studies of these successful practices organized by specific HSIP topics. The individual case studies provide summaries of each practice, key accomplishments, results, and contact information for those interested in learning more.

### Revisiting SHSP Emphasis Areas

FHWA guidance suggested Strategic Highway Safety Plan (SHSP) emphasis areas be selected “that offer the greatest potential for reducing fatalities and injuries.” In developing their original SHSPs, most states began with the American Association of State Highway and Transportation Officials (AASHTO) SHSP as a guide. States selected and prioritized from AASHTO’s 22 emphasis areas based on data analysis using various combinations of fatality and serious injury data. Some states defined new emphasis areas (i.e., rockfall). Others combined crash categories into broader priority areas (i.e., vulnerable road users including pedestrians, bicyclists, and motorcyclists). A few states organized emphasis areas into tiers defined by expected benefits and levels of implementation effort.

Safety priorities change as opportunities arise and/or barriers prevent progress. Some states defined review and update schedules and processes in their original SHSPs. Some initiated updates to improve their SHSPs after a few years of implementation effort demonstrated a need to revisit their emphasis areas. Others initiated updates to take advantage of lessons learned and experiences shared at the national level. A well organized update process helps states ensure the SHSP remains relevant and meaningful, and efforts continue to focus on areas with the greatest potential to improve safety.

Practices for revisiting emphasis areas range from simply reviewing updated data to reconfirm original emphasis area selections, to comprehensive data analysis and stakeholder outreach to take a fresh look at current and potential new emphasis areas. A number of states determined their first SHSP took on too much and decided to scale back to a more manageable number of emphasis areas. In such cases, fatality and injury data have been weighed against other factors such as available resources and levels of stakeholder cooperation. Some states actively track SHSP implementation and monitor performance measures on an ongoing basis as part of their review and update process.

For many states, developing the original SHSPs was a major undertaking. Not all are able to invest the same level of resources or maintain the same level of stakeholder interest in the update process. Some states opting to reduce the number of emphasis areas in their SHSPs have had difficulty determining the appropriate scope and selection criteria. Emerging topics, such as distracted driving, are also proving complicated to address in SHSPs when the science has not advanced far enough to allow for the same level of data analysis and countermeasure selection.

## Noteworthy Practices

The following cases demonstrate noteworthy practices three states are using in revisiting SHSP emphasis areas:

- West Virginia focused their update efforts on reducing SHSP emphasis areas to a more manageable number. The state re-examined the data seeking a noticeable break in the number of fatalities attributed to different contributing factors and were able to identify four emphasis areas accounting for the majority of fatalities. Cross analyzing the data confirmed those areas also encompassed the largest portions of other crash types. The process of paring down the number of emphasis areas has reinvigorated stakeholders and generated strong support from safety partners. ([read more](#))
- Washington State's *Target Zero* workgroup conducted an exhaustive analysis of 11 years of crash data to determine areas with the greatest potential to reduce deaths and disabling injuries. The resulting *Target Zero* update established four priority levels of emphasis areas. The four-tier structure helps to more effectively prioritize the traffic safety emphasis areas and apply the resources needed to address the *Target Zero* vision. In addition, the latest update includes county-level data analysis using the same four-tier priority level framework. ([read more](#))
- Louisiana began the process of updating their SHSP with one of the primary objectives to “narrow the focus of the SHSP to the areas of greatest need and potential for success as identified through a detailed data analysis process.” Two of the original emphasis areas were aggressive driving and distracted driving. Data analysis confirmed these continue to be significant safety problems, but revealed difficulty in assessing the nature and true extent of the problems. The State elected to establish task forces to examine these issues in greater depth, define the issues, and identify strategies and actions with some promise before reinstating them as full SHSP emphasis areas. ([read more](#))

To access these full case studies, click on the individual links above or visit the FHWA Office of Safety on-line at: <http://safety.fhwa.dot.gov/hsip>.



# Focusing on Fewer Emphasis Areas

## West Virginia

### HSIP Noteworthy Practice Series

Revisiting SHSP Emphasis Areas

In September 2007, West Virginia released its first state-wide Strategic Highway Safety Plan (SHSP). The 2007 SHSP included nine emphasis areas established by the Highway Safety Management Team (HSMT)<sup>1</sup> based on analysis of six years of fatality, serious injury, and crash data, along with stakeholder input. Some emphasis areas included subareas. For example, at risk drivers and users included: suspended or revoked drivers, unlicensed drivers, multiple crash/citation drivers, uninsured drivers, younger drivers, older drivers, motorcycles, and ATV drivers. Including all subareas, the State was attempting to address 23 different areas within the purview of the SHSP.

After several years of attempting implementation, it became clear to the HSMT that the scope of the SHSP was unmanageable. Staff from the different agencies were stretched too thin. Having to participate in all the different areas but being unable to dedicate sufficient attention to individual areas stalled implementation and discouraged personnel. In attempting to address the priorities of every stakeholder who had come to the table, they had taken on too much.

Recognizing it was time to update their SHSP, the HSMT knew they wanted to take a different approach but did not have a clear plan of action until getting involved as one of the pilot states for the National *SHSP Implementation Process Model* (IPM). The pilot provided the opportunity to breathe new life into West Virginia's SHSP. It offered new ideas through implementation strategies from the IPM as well as through regular discussions about experiences and lessons learned with other pilot states. Among other takeaways, involvement in the pilot convinced the HSMT that making their plan work would require reducing the number of emphasis areas.

<sup>1</sup> The HSMT is a group of representatives from many facets of state and Federal agencies which all have some area of highways safety responsibilities within their purview. Since the early to mid 1990s this group has existed either formally or informally and has strived to coordinate and effectively manage highway safety programs and initiatives in West Virginia.

### Key Accomplishments

- Narrowed SHSP emphasis areas down to a more manageable number through a data-driven process.
- Provided a more focused scope for pursuing the goal of "Zero Fatalities...Saving One Life at a Time."
- Re-energized partners leading to more active involvement in SHSP efforts.

The process began by focusing on the original goal of "Zero Fatalities...Saving One Life at a Time." The goal had been buried on page five of the original SHSP but was brought front and center in the update and subsequent marketing campaigns.

The HSMT took a new look at the data to determine which emphasis areas had the greatest potential for meeting the goal. They reevaluated the data seeking a noticeable break in the number of fatalities attributed to different contributing factors and were able to identify four emphasis areas accounting for the majority of fatalities on West Virginia roadways: roadway departure, occupant protection, impaired drivers, and at-risk driver age groups (ages 15 to 20 and over 65). They further reinforced the selection by cross analyzing the data and finding these four areas encompassed large portions of other crash types (i.e., roadway departures crashes involved many of the heavy truck, wildlife, and speeding-related crashes). Stakeholders focusing on the other individual crash types were thus invited to participate in emphasis area teams to explore ways to collectively address common concerns. Finally, a fifth emphasis area, improving highway safety data, was added to the update acknowledging the importance of a data-driven approach to safety.



## Results

The updated SHSP is due for publication in the fall of 2010, but the process of paring down the number of emphasis areas has already reinvigorated stakeholders and generated strong support from safety partners. The HSMT is strong and active. With fewer emphasis areas, partners have been able to commit time to participate in meetings and collaborative efforts. Communications staff are now assigned to every team and are more prepared to answer questions from the public. Marketing efforts, both internally and externally, have been made easier with a more focused SHSP.

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# Tiered Emphasis Areas for Statewide and County Safety Planning Washington

HSIP Noteworthy Practice Series

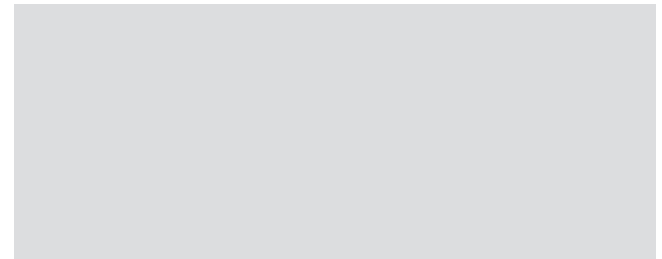
Revisiting SHSP Emphasis Areas

In 2000, prior to SAFETEA-LU, Washington State wrote *Target Zero: A Strategic Plan for Highway Safety*. The *Target Zero* Steering Committee, in cooperation with state, local, and private agencies, designed a plan to support a 30-year vision to achieve zero traffic deaths and disabling injuries. When SAFETEA-LU mandated states develop Strategic Highway Safety Plans (SHSP) in 2005, Washington State was well prepared to meet the challenge.

Previously, the Washington Traffic Safety Commission (WTSC), Washington State Department of Transportation (WSDOT), and other partners focused on trying to meet all traffic safety needs by spreading resources over a multitude of emphasis areas and projects. The analytic nature of the SHSP made it clear that a change in tactics and strategic planning was required to more effectively prioritize the traffic safety emphasis areas and apply the resources needed to address the *Target Zero* vision.

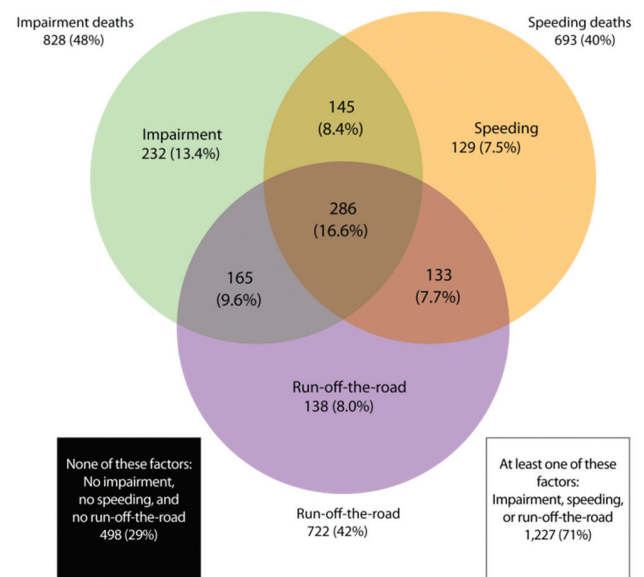
The *Target Zero* workgroup conducted an exhaustive analysis of 11 years of crash and trend data to determine which emphasis areas had the greatest potential to reduce deaths and disabling injuries. Recognizing traffic collisions are often attributable to multiple factors, data analysis revealed impairment and speed were highly associated with every other category of crashes (e.g., impairment and/or speed accounted for over one-half of all run-off-the-road collisions) The *Target Zero* Committee concluded if Washington State can meaningfully reduce impaired driving and speeding, death rates will be cut across the board, therefore, they identified impaired driving and speed as the top priority areas.

In setting priorities for the remaining traffic safety issue areas, the committee looked at the number of over-all traffic crashes, disabling injuries, and deaths; the ability of strategies to reduce disabling injuries and deaths; and the importance of the issue in promoting overall traffic safety (such as improving traffic data and EMS services). The resulting *Target Zero update* (published in February 2007) established four priority levels covering 22 emphasis areas



to serve as a guide for related safety programs and for allocating limited safety resources. It also established a schedule of annual evaluation and revision every few years. Data analysis measuring progress and strategy effectiveness are the basis for revisiting emphasis areas and strategies.

## The role of impairment, speed, and run-off-the-road collisions in 1,725 traffic fatalities in Washington 2006-2008



Data source: FARS and WSDOT Collision Database.



Following that model, the process for updating *Target Zero* began again with intensive data analysis and review of traffic safety planning documents between June and November 2009. The 2010 *Target Zero* update maintains the four-tier priority structure for guiding resource allocation and implementation efforts, with changes made to address new trends in fatal and serious injury crashes:

- Run-off-the-road collisions have been moved to Priority Level One, based on their involvement in 42 percent of all fatalities between 2006 and 2008. The update continues to focus on behavioral aspects of run-off-the-road collisions maintaining impaired driving and speed as priority level one emphasis areas. However, it also acknowledges the importance of engineering strategies specifically to decrease the likelihood a vehicle will leave the roadway and minimize the consequences of leaving the road.
- Distracted drivers have been separated from drowsy drivers and moved into Level Two priority based on their involvement in fatal collisions. (Drowsy drivers were moved to Level Four).
- Drivers without a valid license have been removed as a priority area. Recent analysis found that impairment, speeding, and distraction were the primary contributing factors in fatal crashes involving these drivers so focus will be on these factors.

In addition to revising statewide emphasis areas, updating *Target Zero* included efforts to improve county level safety planning through use of a consistent framework. A review of data found prioritization of statewide emphasis areas was heavily influenced by the most populous counties and cities, which did not necessarily reflect the same priorities for all areas. To address these discrepancies, data analysis was conducted for each individual county and presented in the same four-tier priority level framework.

## Results

Washington's SHSP defines the emphasis areas and the priorities the State has determined have the greatest potential to continue reductions toward the goal of zero fatalities and serious injuries by 2030. Fatalities in the State have steadily dropped since 2005, down 8.6 percent from 2007 to 2008, with preliminary figures for 2009 showing a 6.1 percent decline in fatalities. The traffic fatality rate is also trending downwards dropping to 0.94 deaths per 100 million vehicle miles traveled (VMT) in 2008, the State's lowest rate on record.

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# Speeding and Aggressive Driving and Distracted Driving Task Forces

## Louisiana

### HSIP Noteworthy Practice Series

### Revisiting SHSP Emphasis Areas

Louisiana published their original Strategic Highway Safety Plan (SHSP) in September 2006. Using the American Association of State Highway Transportation Officials (AASHTO) SHSP as a point of departure, the State examined data and identified 11 high-priority emphasis areas with the most promise for driving down the human and economic costs of crashes. In 2009 Louisiana began the process of updating the SHSP with one of the primary stated objectives to “narrow the focus of the SHSP to the areas of greatest need and potential for success as identified through a detailed data analysis process.”

The update process included examination of the data and outreach to safety stakeholders. While attempting to narrow the focus, a careful look at the data revealed some difficulties in assessing the nature and true extent of two of the original emphasis areas – speeding and aggressive driving, and distracted driving. Aggressive driving is a difficult concept to define and involves several typical violations associated with driver behavior. The most often cited violation in aggressive driving crashes is “careless operation.” The 2005 crash report form introduced a new variable addressing distracted driving. However, in many cases, looking closer at the data revealed the factors contributing to distraction were often recorded as “unknown.”

The SHSP Implementation Team recognized aggressive driving and distracted driving represent significant safety problems. However, the Team believed a pragmatic and beneficial approach would be to establish task forces to examine these issues in greater depth before they could conduct the necessary emphasis area level analysis. This resulted in the creation of two Task Forces with the following roles:

### Key Accomplishments

- Maintained a data-driven approach to identifying SHSP emphasis areas.
  - Provided a framework for addressing significant “developing” emphasis areas.
- Determine infraction definitions, i.e., develop a definition that can be used by law enforcement, the judiciary, etc.;
  - Review the literature and research to identify effective countermeasures;
  - Review current practice and laws to determine and propose changes;
  - Participate in quarterly SHSP implementation team meetings; and
  - Report findings to the Executive Committee and Implementation Team.

By establishing the task forces on aggressive driving and distracted driving, Louisiana maintained a data-driven approach to defining SHSP emphasis areas with the greatest potential to reduce fatalities and serious injuries while acknowledging the potential significance of such topics.



## Results

To date, approximately 40 stakeholders representing the 4 Es of safety (engineering, enforcement, education, and EMS) have signed up for either the Distracted Task Force or the Aggressive Driving Task Force. The Task Forces are setting out to determine: 1) appropriate methods for analyzing the data to develop a clear picture of the problem; and 2) effective countermeasures. Once those tasks are accomplished, the intent is to transition the “developing” emphasis areas into full SHSP emphasis areas.

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Highway Safety Improvement Program  
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